

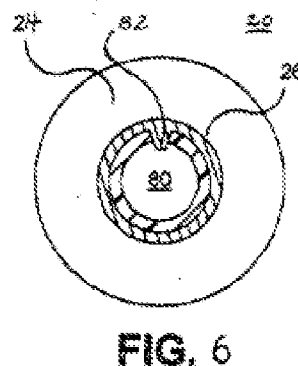
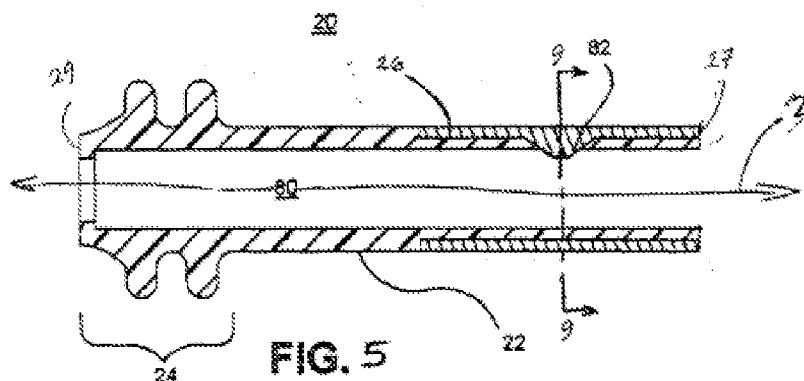
REMARKS

Claims 1-6, 8-10, 12 and 13 continue to be rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,755,694 to Ries et al. ("Ries").

Applicants' Previous Argument in Response to the Rejection

In response to the previous office action, Applicant argued as follows:

Independent claims 1 and 10 recite a lead connector system for a lead that has a plurality of lead electrodes connected to an array of lead connector pads that are distributed circumferentially in an adjacent spaced apart relationship around a periphery of the lead connector. The lead connector is inserted into an adaptor with a lumen and can be rotated within the adaptor lumen. The adaptor has a connector ring extending circumferentially over a segment of an exterior surface of the adaptor body. The ring has an electrical contact resilient key formed along an inner portion of the connector ring and extends through the adaptor body into the adaptor lumen. Thus, the key forms a projection from the inner lumen surface. The contact key is dimensioned to be in registration with one of the lead connector pads at a time when the lead connector is inserted into the lumen of the adaptor body and rotated relative to the adaptor body about a longitudinal axis. An embodiment is shown in Figs. 5 and 6:



Shown in these drawing figures is a connector ring 26 with a contact key 82 extending into the lumen 80.

Ries is characterized as disclosing an upsizing lead adaptor having a conductor ring. Specifically, conductor 212 and teeth 214 shown in Figure 5 of Ries are relied upon. The structure is shown in Ries as:

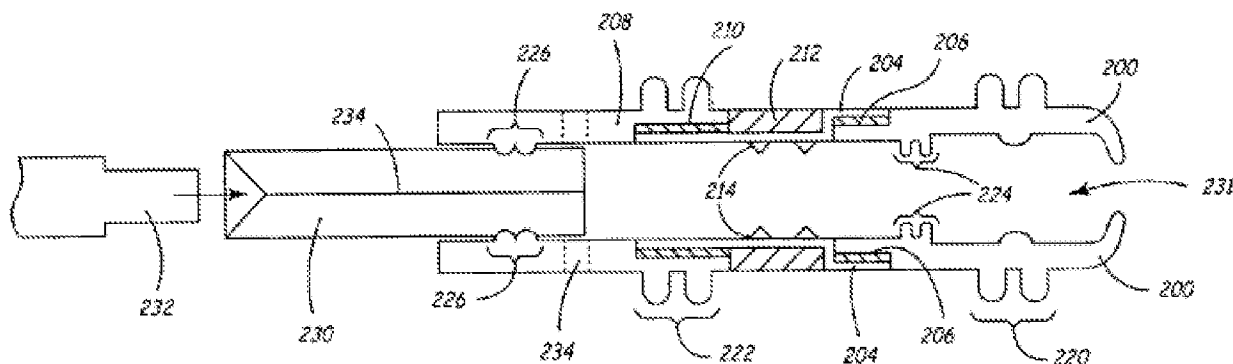


FIG. 5

The upsizing sleeve of Ries addresses only the problem of diameter incompatibility. The teeth 214 are provided only for purposes of engaging a connector ring of a bipolar lead. There is no lead electrode array selectivity. That is, when a bipolar lead 232 is inserted into the lumen of tubular member 208, the connector ring of the lead is engaged by the teeth 214. Rotation of the lead within tubular member 208 does not alter the connections made to the lead electrodes as there is a single circumferential ring that connects to a single electrode of the bipolar lead. Thus, the limitation in claims 1 and 10 that “the key dimensioned so as to be in registration with one of the lead connector pads at a time when the lead connector is inserted into the lumen of the adaptor body and rotated relative to the adaptor body about a longitudinal axis extending from the proximal end of the insulating adaptor body to the distal end of the insulating adapter body” is absent from Ries. Accordingly, Ries fails to anticipate claim 1. The anticipation rejection of claims 1, 10 and the claims dependent on them should be withdrawn.

Method claim 12 is similar to claims 1 and 10. Claim 12 recites a step of providing an adaptor having the same structural limitations recited in claims 1 and 10. Therefore, method claim 12 and the claims dependent on it are not anticipated by Ries.

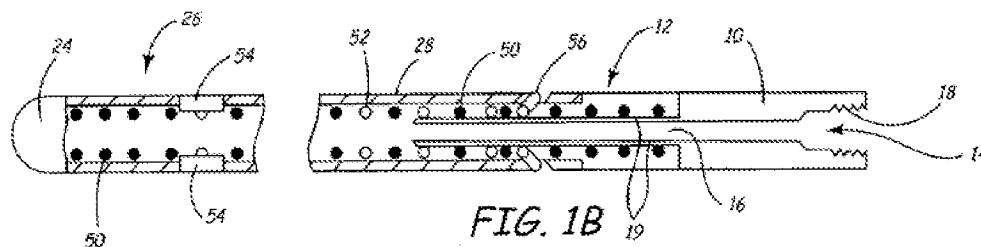
Examiner's Response to Applicants' Arguments

The Examiner now contends that, according to Fig. 5 of Ries, when a lead is inserted into the adapter body there is registration of the teeth 214 (considered to be the "key" limitation) with a selected lead connector pad and selectivity is provided due to the placement location of the teeth.

Applicants' Rebuttal to Examiner's Response to Applicant's Arguments

The fallacy in the Examiner's response is that Ries does not have an array of lead connector pads and in particular does not have an array of lead connector pads that are distributed circumferentially around the lead connector. As set forth in column 7, line 67 to column 8, line 6, a lead 232 shown in Fig. 5 is a bipolar lead that has only a connector ring. The bipolar lead 232 does not have an array of lead connector pads among which a selected one is placed into registration with the teeth (key).

Embodiments of a bipolar lead that is used in Ries are shown in detail in Figs. 1B and 1C:



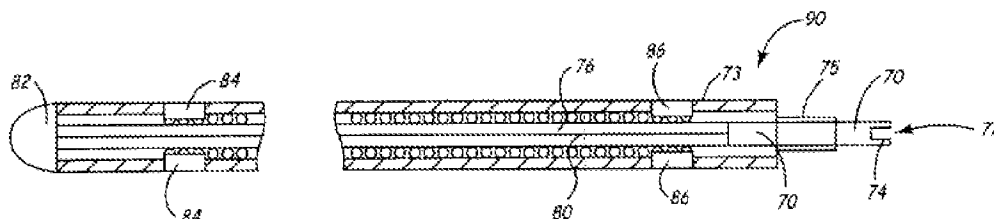


FIG. 1C

The depictions of Figs. 1B and 1C are further described as:

FIG. 1B is a side cutaway view of an exemplary bipolar lead connector of the type that may be employed with the current inventive system.

FIG. 1C is a side cutaway view of yet another exemplary bipolar lead connector of the type that may be employed with the current inventive system.

See column 3, lines 12-18.

In both embodiments, there is a single ring connector pad:

current inventive system. In FIG. 1B, elements that are similar to those shown in FIG. 1A are labeled with like designators. The lead of FIG. 1B includes a connector pin 10 that couples to conductive member 19. Conductive member 19 is electrically and mechanically coupled to an insulated coiled conductor 50. This conductor 50 extends the length of lead body 12 and is coupled at the distal tip 26 to tip electrode 24. A second insulated coiled conductor 52 is also provided to couple ring electrode 54 at the lead distal end to ring connector 56. In another embodiment, the conductors may be single or multi-filar stranded conductors.

Column 5, lines 1-11 (ring connector 56).

FIG. 1C is a side cutaway view of yet another exemplary bipolar lead connector of the type that may be employed with the current inventive system. In this embodiment, a connector pin 70 is shown having an opening 72 that includes an inner, threaded surface 74. A portion of the connector pin is shown surrounded by an insulative sleeve 75 which may be formed of a polymer. This insulative sleeve electrically isolates pin from a connector ring 73, and provides additional structural support. The connector pin, which may have dimensions conforming to an IS-1 or another standard, extends within an inner lumen 76 of the lead body 12. This inner lumen houses a stranded conductor 80 such as shown in commonly-assigned U.S. Pat. No. 5,760,341 that is electrically coupled to tip electrode 82. The conductor 80 may be a single or multi-filar stranded conductor, or in a different embodiment, may be a coiled conductor. A second, coiled conductor 84 electrically couples ring electrode 86 to connector ring 73. It may be noted that although the connector pin 70 of this design may be of a dimension that corresponds to a standard such as an IS-1 connector pin standard, the overall lead dimensions of the proximal end 90 of the lead do not necessarily conform to any standard.

Column 5, lines 12-34 (connector ring 73).

Accordingly, in Ries, there is no selectivity among a plurality of lead connector pads in an array of pads at the proximal end of the lead. Such being the case, the Examiner's response to Applicants' arguments is erroneous, flawed, and without support in Ries.

Applicants submit that the amendments to the claims and the remarks presented herein are fully responsive to the Office Action and are sufficient to overcome the anticipation rejections presented in the Office Action. Issuance of a notice allowance is requested.

Should any issues remain outstanding, the Examiner is urged to telephone the undersigned to expedite prosecution. The Commissioner is authorized to charge any deficiencies and credit any overpayments to Deposit Account No. 13-2546.

Respectfully submitted,

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Date

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